

5

- 1. A method of producing a lead alloy strip for battery electrodes comprising extruding a lead alloy through a die block to produce an extrusion having a desired shape and rapidly cooling the extrusion to acquire a lead alloy grain size in the range of about 10 to 300 microns.
- 2. In a method as claimed in claim 1, extruding the lead alloy in the shape of a tube extrusion, slitting and opening the tube, and rolling the opened tube into a planar strip prior to rapidly cooling the extrusion.
- 3. In a method as claimed in claim 1, extruding the lead alloy in the shape of a planar strip.
 - 4. In a method as claimed in claim 1, extruding the lead alloy to produce an extrusion having a desired profile.
 - 5. A method as claimed in claim 2 or 3, rapidly cooling the planar strip under tension and winding the cooled strip into a coil.
- 15 6. A method as claimed in claim 2 or 3, additionally comprising slitting and expanding the cooled planar strip into an expanded grid by rotary expansion.
 - 7. A method as claimed in claim 2 or 3, additionally comprising forming the cooled planar strip into an expanded grid by reciprocating expansion, punching, machining, waterjet cutting, spark cutting or laser cutting.
- 20 8. A method as claimed in claim 4, rapidly cooling the extrusion under tension and winding the cooled extrusion into a coil.
 - 9. A method as claimed in claim 4, additionally comprising slitting and expanding the cooled extrusion profile into an expanded grid by rotary expansion.
- 10. A method as claimed in claim 4, additionally comprising forming the cooled extrusion profile into an expanded grid by reciprocating expansion, punching, machining, waterjet cutting, spark cutting or laser cutting.
 - 11. An extruded lead alloy strip for battery electrodes produced by the method of any of claims 1 through 10.
- 12. An expanded grid produced by a method according to any of claim 6, 7, 9 or 10 for use as a battery electrode.

13. A lead acid battery having a plurality of battery electrodes produced by a method according to any of claim 6, 7, 9 or 10.